DOCUMENT RESUME

ED 322 278 UD 027 591

AUTHOR	Guthrie, Larry F.; Guthrie, Grace Pung
TITLE	Providing Options for At-Risk Youth: The Health and Media Academies in Oakland. Interim Report.
INSTITUTION	Far West Lab. for Educational Research and Development, San Francisco, Calif.; National Center on Effective Secondary Schools, Madison, WI.
SPONS AGENCY	Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE	May 89
CONTRACT	406-28-25
GRANT	G008690007
NOTE	20p.
AVAILABLE FROM	Far West Laboratory for Educational Research and Development, 1855 Folsom Street, San Francisco, CA 94103.
PUB TYPE	Reports - Evaluative/Feasibility (142) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*College Preparation; Community Involvement; Cooperative Programs; Curriculum Development; *Dropout Prevention; *Health Occupations; High Schools; *House Plan; *Mass Media; Nontraditional Education; Program Evaluation; *School Business Relationship; Urban Schools
IDENTIFIERS	*Oakland Unified School District CA

ABSTRACT

This interim evaluation compares the initiation, design, and curriculum of two school-based "academy" programs in Oakland (California) high schools and examines their links to the school district and the business community. The academy model of schools-within-a-school originated in Philadelphia. The Health Academy at Oakland Technical High School prepares students for postsecondary study in the health professions. The Media Academy at John C. Fremont High School gives students experience and training in both print and electronic media. Students at the Health Academy have been identified as at risk of dropping out but are judged to have the potential to succeed. Students at the Media Academy are exclusively selected from feeder junior high schools. The curricula of the academies focus on different academic areas, but share an emphasis on postsecondary preparation. Business and community involvement is an important component of both programs, with links to local institutions of higher learning, public hospitals, newspapers, and television stations. However, support from the local school district has been unsystematic. Both academies would benefit from increased involvement by the school district and the business community, and the directors need more planning and development time to maintain the schedule of growth that they envision. A list of four references is appended. (FMW)

ED322278

Providing Options For At-Risk Youth:

The Health and Media Academies in Oakland

Interim Report

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Larry F. Guthrie

Grace Pung Guthrie

May 1989

FAR WEST LABORATORY

VD 027 591

BEST COPY AVAILABLE

Providing Options For At-Risk Youth:

The Health and Media Academies in Oakland

Interim Report

Larry F. Guthrie

Grace Pung Guthrie

Work on this paper was supported by the Office of Educational Research and Improvement, Department of Education, under Contract No. 406-28-25 to the Far West Laboratory for Educational Research and Development, San Francisco, California, and under subcontract to the National Center on Effective Secondary Schools, University of Wisconsin, Grant No G008690007.

INTRODUCTION

School dropouts, low academic achievement, drug abuse, and teenage pregnancy continue to plague American education. These problems are often most acute among minority populations in the inner-city. Oakland, California, is no exception. Nearly half the students in the district qualify for AFDC payments, and roughly 900 high school students (11 percent) don't return to school each year.

To combat these problems, two high schools in Oakland, California, have been experimenting with ways to reorganize the high school experience for their inner-city students and increase the number who graduate, get good jobs, or enroll in college. One approach has been to set up school-based "academies," such as the Health Academy at Oakland Technical High School and the Media Academy at John C. Fremont High School.

Based on a concept originated in Philadelphia and successfully replicated elsewhere, these schools-within-a-school provide students with an academic curriculum focused on a vocational area. The Health Academy prepares students for postsecondary study in the health professions. The Media Academy gives students experience and training in both print and electronic media.

The Health Academy, set up in 1985, has graduated its first cohort of students. The Media Academy, begun a year later, will have its first graduating class in 1989. These programs both hold great potential and, though relatively new, already show evidence of success.

For the past year, staff from Far West Laboratory have been observing classes, talking with teachers and students, and interviewing other people involved with the programs. This paper presents interim findings from that study. The focus of current work in the project is on examining outcomes of the academy program in terms of student achievement, attendance, and perceptions. A final report on these findings will be available in November 1989.

In this paper, we compare the initiation, design, and curriculum of the Health and Media Academies and their links to the school district and business community. In the process, we identify strengths and weaknesses of the two academies and suggest alternatives for program improvement.

THE HEALTH AND MEDIA ACADEMIES OF OAKLAND

In 1969, the business and education communities in Philadelphia joined forces to design a program to address the needs of at-risk youth. Originally conceived of as a vocational program, the Philadelphia Academies gave students experience and training in the electrical, business and commerce, and health fields. The Philadelphia Academies shared several key features: a school-within-a-school organization with cohorts of about 50 at-risk students per year enrolled in a common curriculum; business involvement in the management of the program; an occupationally relevant curriculum; work experience; and visible district support (Sydney and McMullan, 1987).

The academy model was first introduced to California in two high schools on the San Francisco Peninsula. The Electronics Academy in Redwood City and the Computer Technology Academy in Menlo Park prepare students for entry-level jobs in high-tech Silicon Valley industries. The success of these programs in reducing school dropout and increasing student employment (American Institutes for Research, 1984) led to the establishment of several other academies around the state; among them were the Health Academy and the Media Academy. In establishing their programs, the Oakland schools maintained most of the features of the other academies but shifted the focus of the intervention toward preparation for postsecondary education, rather than over job preparation.

The Health Academy

The Health Academy was set up in 1985 at the initiation of Alan Weisberg of the Oakland Alliance, a local business collaborative. As an evaluator for the Peninsula Academies, Weisberg was so enthusiastic about the academy model that he approached the district superintendent and the principal of Oakland Technical High School with his plan. They then actively pursued and secured a planning grant from the California State Department of Education to establish the Health Academy in Oakland.

The choice of the health professions as a focus was a logical one since the health industry is the largest employer in Oakland. The area surrounding Oakland enjoys a steady growth in the health-related bio-technology as well. Oakland Technical High School, within walking distance of "Pill Hill," the site of several hospitals, was the obvious choice for a school.

Also only a few blocks from downtown, Oakland Technical High faces a busy thoroughfare. The school enrolls approximately 1,800 students, 94 percent are minorities (73 percent Blacks, 17 percent Asian and Pacific Islanders, 3 percent Hispanics, and 1 percent Filipinos). Over one-third of the students qualify for AFDC payments.

With the initial planning grant, Patricia Clark, an English resource teacher at the school, was selected to develop the program and serve as its first director. By the time it had been in operation for three years, the Health Academy involved nine teachers under Clark's leadership and served 120 students in three grade levels. Students are block-programmed into different levels of academy English, math, and science courses. These courses cover the same curricular objectives as others in the school, but they emphasize medical or health issues whenever possible.

Business and community members also take part in several ways: Students make frequent field trips to the nearby hospitals, are given opportunities for part-time and summer jobs, and participate in seminars at the Samuel Merritt College of Nursing.

The Media Academy

The Media Academy was begun a year later as part of the effort of the Oakland Unified School District to extend the academy model to three other high schools. The district's academies offer concentrations in media, business and finance, and computer technology. The Media Academy built on the productive journalism program at Fremont High School already in place and directed by Steve O'Donoghue. Since most journalism or broadcasting jobs today require a college degree, the Media Academy was essentially designed as an academic preparation program.

In focusing on print or electronic media, the academy at Fremont High School represents a new direction for the academy model, one that holds considerable promise. It offers students the opportunity actually to practice journalism as part of their school experience; O'Donoghue's students not only publish the school paper, but put out a bilingual community paper, *El Tigre*. As the electronic media portion of the curriculum is developed, possibilities will grow in that area as well.

Like Oakland Tech, John C. Fremont High School is located in a low- income area of Oakland. Out of about 1700 students enrolled, 98 percent are minorities (54 percent Blacks, 32 percent Hispanics, 8 percent Asian and Pacific Islanders, 3 percent Filipinos, 1 percent Native Americans). The Media Academy occupies two portables near the back entrance of the school; one serves as the academy office and O'Donoghue's classroom. The school newspaper, the *Green and Gold*, is produced in the academy office, which is home for several computers, a typesetting machine, a new digital scanner, and a darkroom.

One of the English teachers, Michael Jackson, works closely with O'Donoghue and has as his classroom the second portable. The proximity of these buildings facilitates block-scheduling students and coordination between the two teachers. Two social studies teachers and a librarian also work in the program, but because of their commitments to other school activities, they have not been active participants.

In its second year of operation, the Media Academy served 84 students at two grade levels (the total number of students projected for 1988-89 school year is 125-130). Students take their English and journalism classes together in the morning and share many of their other classes as well.

The Media Academy has an Advisory Panel that includes the editor and president of the Oakland *Tribune*, local radio and television personalities, and communications faculty from the University of California, Berkeley and San Francisco State University. These professionals provide guidance and publicity for the academy and give occasional lectures to the students. Several corporations have also contributed time and equipment to the academy.

Academy Students

Students selected for the Health Academy are at-risk of dropping out of school but are judged to have the potential to succeed. While school staff may describe some of them as "average" in achievement, at these two schools, "average" may include students who are three or more years behind grade level. Many academy students have life experiences common to inner-city life. They come from single-parent homes and encounter crime, drugs, and prostitution daily.

Since Oakland Tech is a four-year high school, most of the academy students are recruited from the school's ninth grade; a few, however, come from a feeder junior high school. Students are selected through application or by teacher or counselor recommendation. Each spring, Clark makes presentations in the ninth grade classes, describing the unique aspects of the program: the science and medical emphasis, employment potential, and enrichment activities. When teachers recommend a student, Clark either meets with the student or sends a packet of materials to the student's home. Unaccustomed to formal application procedures and lacking confidence, many students applied by simply slipping a vague note under her door or that of the counselor.

At the Media Academy, students are exclusively selected from feeder junior high schools since Fremont High only includes grades 10-12. The students sought for the Media Academy differ somewhat from the Health Academy, although the difference appears to be more in intention than in reality. Because of the strong emphasis on writing and journalism in the Media Academy, basic skills in composition are a prerequisite. Students must fill out an application form that asks for information on extracurricular, journalistic, speech or drama activities, career goals, and role models/ heroes. Applicants are also asked to submit a sample of their writing and to enclose an essay, in 150 words or more, describing their favorite television show and explaining why they recommend it.

Each spring, O'Donoghue visits all the feeder junior high schools, describes the Media Academy and its offerings, and distributes the application packet to interested students. As in the Health Academy, teacher recommendations also play an important part in identifying future students.

CURRICULUM FOCUS

While the Health and Media Academies focus on different academic areas, they share an emphasis on postsecondary preparation. The academic curriculum in the Health Academy offers students more alternatives beyond high school, and complements a JTPA Health Professions program, where vocational skills and job-training are stressed. At the Media Academy, since present-day jobs in print, radio, or television journalism usually require a college degree, the goal has been to provide a strong academic foundation for students interested in pursuing these careers.

The Health Academy Curriculum

In the first year, Health Academy students take English, math, biology, a biology Lab, and a computer Lab. The academy English classes integrate literature with a health or biological orientation into the readings.

The library adjacent to the academy's main classroom, for example, contains multiple copies of related novels as well as a collection of health and medical texts.

With extra academy funding, science instructors can purchase more equipment and materials than other teachers. In part, this means more microscopes, dissection kits, and hence more frequent laboratory work. Over the past year, the biology class, for example, dissected a number of different specimens, including sharks, starfish, and rabbits. The computer lab, which alternates with the biology lab in the schedule, provides students with instruction in word processing and gives them experience in developing resumes and writing term papers and business correspondence. Some classroom activities are designed to simulate actual work experiences, such as when students are asked to complete assignments in five-member teams, with one member acting as supervisor.

In their senior year, students not enrolled in chemistry take advanced health occupations as a science class. This class covers medical terminology and the basic skills hospital technicians, clerical workers and nurses' aides need for their work. In the second semester, students get experience at a local hospital, working in a different department each week for 12 weeks. As a result of their excellent performance, several Health Academy students have been hired for summer work at the hospital at $9.00 per hour (more than district substitute teachers receive).

The Media Academy Curriculum

The Media Academy curriculum is designed to help students develop and apply reading, writing, critical thinking, and technical skills through the hands-on production of school newspapers, magazines, and radio and TV projects. Besides English and journalism classes, sophomores take world cultures, foreign language, biology, and algebra or geometry. Juniors and seniors learn specific skills in print and electronic media careers in addition to the standard academic program. Starting in

1988-89, juniors were provided mentors who are successful role models in various media professions. Summer employment and internships with the local media are also in the works.

An important Media Academy event is the three-day field trip to Yosemite National Park. This past year, 45 students and 5 adults made the journey. For many inner-city students, this excursion was their first experience in the mountains; some had never left Oakland before. But O'Donoghue sees the field trip as more than an opportunity to expose Academy students to the natural world; he builds the time around journalism activities. After a hike, for example, students wrote up descriptions of their experience and then critiqued each others' work. This past year, in addition to the four school faculty members who went along, a practicing freelance journalist accompanied the group. He not only provided them with guidance and feedback on their stories but also gave them insights into the life of a professional reporter.

Students also participated in the Journalism Education of America National Spring Convention, which was held in San Francisco in 1988. O'Donoghue was program chair. In June, the Media Academy held its annual Academy Awards Dinner at a local restaurant. The principal, academy teachers, students and their parents attended the event. The program included an invited speaker, and O'Donoghue and Jackson gave students various awards to students as incentives to work harder in the coming year.

BUSINESS AND COMMUNITY INVOLVEMENT

An important component of both the Health and Media Academies is the involvement of business and community members. In the case of the Health Academy, local institutes of higher education and public hospitals are active contributors. The Media Academy is linked with local newspapers, television stations, and the Institute of Journalism Education at the University of California, Berkeley.

Health Academy Involvement

The involvement of other agencies in the Health Academy began in the planning stage, when a steering committee was formed of CEOs and other administrators from several local hospitals. Since that time, the hospitals, other health organizations, and universities have donated time and equipment, arranged field trips, and provided health science instruction, guest speakers, and summer jobs.

Kaiser Hospital, a large health maintenance organization nearby, granted $5000 to the academy and has provided 20 jobs each summer at $9.00 per hour. A local chiropractic college has hosted an annual field trip that allows students to tour the entire facility, and the Red Cross has donated 20 hours of AIDS training to juniors.

A California Academic Partnership Program (CAPP) grant formalized the connection between the Health Academy and the Samuel Merritt College of Nursing (SMCN). As a partner, SMCN has been involved in planning and has also hosted several field trips, donated supplies, and provided mentors. In addition, faculty of SMCN and St. Mary's College are working with Health Academy science teachers to develop science mini-units.

Planned field experiences offer students a chance to attend selected classes or hands-on clinical labs at local colleges. For instance, students recently visited a four-hour clinical lab at the Samuel Merritt College of Nursing. Guest speakers have included doctors, nurses, and professors from the University of California, Berkeley.

Tutoring in science and mathematics are provided by students in the Professional Development Program (PDP) at the University of California, Berkeley, a program designed for underprepared freshman minority students. The PDP tutoring goes beyond helping students with homework to include training in group study skills, suggestions on how to "psyche out" a book and verbalize solutions to math problems.

Media Academy Involvement

The Media Academy gets business and community support mainly through its Program Advisory Committee. As with the other academy, outside agencies have been involved from its inception. Members of the Advisory Committee, for example, help in fundraising and arrange field trips and other learning experiences for the students. Several corporations have made donations for equipment purchase, and a number of journalists have contributed their time to the Media Academy. A reporter from the Tribune, for example, spoke to the students about getting and following-up on leads; the education reporter from the same newspaper addressed the topic of story development; and the director of the Institute for Journalism Education at UC Berkeley made a presentation on journalistic style and standards.

Among the other fieldtrips students visited the Oakland Tribune newspaper plant and the Harbor Bay Isle Teleport Corporation. When they visited the Tribune, students toured all the facilities and met with top executives, including the editor and publisher, Robert Maynard. Harbor Bay Isle Teleport Corporation is located in a new business park across the Oakland Estuary in Alameda. A unique feature of the facility is its satellite transmission capability, which was demonstrated for the students.

For both academies, the newly formed Joint Academies Support Committee, or "Super Advisory Committee," provides additional community and business support. Comprised of members of the Site Advisory Committee from each of the four district academies, this group may turn out to be an effective mechanism for pooling business contacts and support. This new "committee" is intended to maximize the mutual benefits of the school and business partnerships.

DISTRICT INVOLVEMENT: THE JOINT ACADEMIES SUPPORT COMMITTEE

An essential component of the Philadelphia academies has been the strong and visible support of the district and school. For example, the Philadelphia High School Academies Association is an umbrella organization that includes an executive director and a board of directors made up of both business and district representatives.

In Oakland, district support has been less systematic. Once the district adopted the concept of academies, and came up with resources to fund additional academies, the new schools were largely on their own, without district-level coordination. As O'Donoghue put it, "There was no planning, basically. They just decided one spring, and announced that these academies were going to start the following fall." He estimated that the Media Academy is about a year behind schedule in its development for this very reason. Both Clark and O'Donoghue have operated largely as "educational entrepreneurs," relying very much on their own personal vision and resourcefulness in implementing the academy programs. Both the school and district have left them alone to do what they see fit without layers of bureaucratic interference. This absence of strong direction has sometimes been interpreted as a lack of support; both Clark and O'Donoghue would have appreciated substantive contributions in terms of funds and personnel, for example. As both academies have become more visible locally and nationally (See, for example, Smith, 1988; and Wehlage, Rutter, Smith, Lesko, and Fernandez, 1989), the school and district leadership has shown an increased willingness to provide such support. In May of 1988, for example, the superintendent invited principals, counselors, teachers, other school staff, and community people to a "Reception for the Academies." Held at a major downtown hotel, the affair was designed to publicize the academies and garner stronger district-wide support.

The district is making an attempt to improve its support in other ways as well. A half-time district program manager position was installed to provide overall district coordination and support. This program man-

ager, Allie Gordon, has been developing a master plan for the district academies programs. She has also called the site advisory committees of the four programs to meet together, as the Joint Academies Support Committee, in some respects comparable to the Philadelphia High School Academies Association. One of their first tasks will be to review and revise the master plan, academies procedures and guidelines. This document will provide written guidelines for existing and prospective academies. To date, however, effective implementation has largely depended on the director's personal knowledge, networking, and dedication.

So far, the Joint Academies Support Committee has focused on the district's plan to restructure the academies as magnet programs. The financially strapped district is particularly interested in the magnet design because it will enable the district to recover 80 percent of the cost. The district also sees magnet programs as a way to alleviate the racial tension and de facto segregation in OUSD. But the Joint Committee was vocal in its opposition to the plan. White students make up only eight percent of district enrollment, and the low-income schools where the academies are housed are predominately Black, Hispanic, and Asian students. Committee members argued that the move toward magnet programs could mean that minority students, whom the academies were established to serve, may be pushed out in order to include other students for the sake of a better racial balance.

Based on experiences with two magnet programs in the district, O'Donoghue expressed his concern about the new developments: "We are losing Asians and Hispanics at the junior high level before they ever get here because magnet schools that don't have Asians and Hispanics are coming over here to recruit."

CONCLUSION

At this stage of our study of the Health and Media Academies, we are continuing to gather and analyze performance data on the two pro-

grams. Early indications are, however, that both academies are having considerable success. The academies are beginning to provide additional evidence that the academy approach holds real promise for at-risk students; for keeping them in school and preparing them for productive adult lives. At the Health Academy, for example, 18 of 24 (75 percent) graduating seniors were accepted at four-year colleges; and 13 met the entrance requirements for universities in the California system. Yet as entering ninth graders, all but one of these same students scored below the fifieth percentile in both English and math on the California Test of Basic Skills.

At the Media Academy, only six students dropped out of school during the first two years of the program. Of these, two got married and left school to work; the others apparently were simply unable to overcome a variety of personal and family-related problems.

Numbers alone, however, cannot capture what the academy programs are about. In the long run, the effect of the program on students in other, more qualitative, ways may be more critical. In both academies, for example, a clear sense of belonging has developed among the students. Students from the Health Academy reported that nearly all their friends were fellow academy students. Similarly, Media Academy students were observed to be helpful and caring to one another as in a big family. They also show a strong sense of ownership toward the academy itself. When students come to the Media Academy office before and after school and between classes, for example, they come because they are part of a team with projects to complete, not just to socialize.

The academies also seem to motivate students to learn and to develop an interest in academics. As one Health Academy girl put it, other students consider them to be "bookworms" because they study and care about their classes. Another said she preferred the academy classes because students in the others are "half asleep" and "don't worry about school." Students' aspirations are not restricted to entry-level jobs, either. Virtually all plan to attend college, and if the experience of the Health Academy is an indication, most will.

Several reasons can be given for the increased commitment to school that these students show. Not least among them was the school-within-a-school concept, which enabled students to develop their sense of belonging and ownership. Another factor appeared to be the teachers' personal attention and caring; as several students put it, Mr. O'Donoghue or Mrs. Clark was "always there." The curriculum, too, was critical, for it gives students a chance to see a purpose and relevance in their classes. Community and business involvement, which helps to connect the academies to the world of work, adds to their sense of purpose.

This overview of the Health and Media Academies has shown that, despite obvious differences in focus and context, the two programs share important features. Both academies have a clear focus on academics, in contrast to the standard academy model as developed in Philadelphia. While they prepare students for jobs, neither is vocational in the usual sense: Preparation for postsecondary education is the primary goal. As schools in the same district, the academies also share the support of the Oakland Unified School District. Though at first district support was somewhat unreliable, increasingly, the district is taking a more active role in financing the academies and providing them with guidance and some administrative service. A third feature of the Health and Media Academies is the strong leadership at the school site that they both enjoy. The dedication and involvement of Clark and O'Donoghue was not an issue stressed above, but it should be apparent. In fact, this may be the single most important reason these two academies are growing, while their counterparts in two other schools continue to struggle.

Both academies faced important challenges. The Health Academy played the role of the pioneer, first getting the district to listen and then testing the academy model as a possible alternative. The Media Academy also broke new ground, but in a different way. Print and electronic journalism is a professional/vocational area previously unexplored within the academy model. Because the concept of a health academy had already been tested in Philadelphia and Houston, the curriculum and experiences of those two could be drawn upon. In contrast, O'Donoghue literally

started from scratch in developing not only his linkages to the private sector, but also the curricular offerings.

Funding is another area in which the Health and Media Academies vary. The Health Academy has had reliable funding from the State of California, and this additional $50,000 per year has allowed Clark greater flexibility in planning and program development. In contrast, O'Donoghue has largely counted on the financially-strapped district, which has managed to fulfill its promises, but has frequently been slow in doing so. One drawback of the state funding is that it carries along with it additional reporting requirements and much more paperwork, but perhaps this is a small enough price to pay for the added security.

In some respects, the Health Academy appears to be a more fully-developed, fully-realized academy, having enjoyed state support and an additional year to mature. More teachers are involved in the Health Academy, and the local hospitals and universities have taken an active role in providing field trips, tutoring, and job opportunities for the students. Yet the Media Academy has also made significant progress in its first three years, especially in securing the commitment of businesses and in developing creative activities for its students. For one thing, the local media have taken an active interest in its well-being. The *Tribune* has practically adopted the program; the editor, for instance, once interceded with the district superintendent on behalf of the academy. The trek to Yosemite has become an annual event. It not only provides students with new experiences, but with valuable writing and reporting practice.

Alternatives for Program Improvement

This brief examination of the current operation of the two academies is by no means conclusive; it does suggest at least two strategies for improvement that the Health and Media Academies might employ. First, a stronger role for the district Joint Academies Support Committee should be encouraged. These advisors not only have the best interests of the

academies and their students in mind, but they also have a broader view of the entire district and all four academies. Together, they can provide the academies greater resources and contacts into the surrounding business communities. Both the Health and Media Academies can benefit from stronger and more direct support. In Philadelphia, for example, the school district and local businesses are actively engaged in Academies program management.

Second, the directors of the Health and Media Academies need more planning and development time to maintain the schedule of growth they envision. Enough time and resources should be provided Clark and O'Donoghue to carry this out. An additional planning period each day would not be enough; they are already overcommitted and need that time to keep up. In the Philadelphia Academies, the private sector contributes resources to support teachers' planning time, both after school and in summer. This might be a viable option in Oakland, where district funding is seriously constrained.

REFERENCES

American Institutes for Research. (1984). *Replication guide for the Peninsula Academies*. Palo Alto, CA: American Institutes for Research in the Behavioral Sciences.

Smith, Gregory A. (1989). *Educational Leadership*. February 1989, Vol. 46, No.5, pp.38-39.

Sydney, P., and McMullan, B.I. (1987). Philadelphia High School Academies. In B. I. McMullan, P. Snyder, S. Rosenblum, D. Gruber, and J. Tyler (Eds.), *Allies in Education: Schools and Business Working Together for At-Risk Youth*, Volume II, Philadelphia, PA: Public/ Private Venture.

Wehlage, Gary G., Rutter, Robert B., Smith, Gregory, A., Lesko, Nancy, and Fernandez, Ricardo R. (1989). *Reducing the risk: schools as communities of support*. Philadelphia, PA: The Falmer Press.